

PEMBRIDGE CE PRIMARY SCHOOL LEARNING JOURNEY ITINERARY

Pembridge is a school where we encourage everyone to be inspired through faith in God and to live by Christian values so that our teaching and learning is of the highest quality, our whole community flourishes and we reflect all that is worthy of praise.

SUBJECT: Computing

YEAR GROUPS: UKS2

PREVIOUS KNOWLEDGE We would expect most children to already be able to:

- achieve most objectives from the LKS2 itinerary.

End of Unit Objectives – Most children should be able to:

<i>Algorithms and Programmes:</i>	<i>Data retrieving and Organising:</i>	<i>Communicating:</i>
• combine sequences of instructions and procedures to turn devices on or off • understand input and output • use an ICT program to control an external device that is electrical and/or mechanical • use ICT to measure sound or light or temperature using sensors • explore ‘What is’ questions by playing adventure or quest games • write programs that have sequences and repetitions • explain how an algorithm works • detect errors in a program and correct them • use an ICT program to control a number of events for an external device • use ICT to measure sound, light or temperature using sensors and interpret the data • explore ‘what if’ questions by planning different scenarios for controlled devices • use input from sensors to trigger events • check and refine a series of instructions	• listen to streaming audio such as online radio • download and listen to podcasts • produce and upload a podcast • manipulate sounds using Audacity • select music from open sources and incorporate it into multimedia presentations • work on simple film editing • explore the menu options and experiment with images (colour effects, options, snap to grid, grid settings etc.) • add special effects to alter the appearance of a graphic • ‘save as’ gif or i peg. wherever possible to make the file size smaller (for emailing or downloading) • make an information poster using their graphics skills to good effect	• use instant messaging to communicate with class members • conduct a video chat with someone elsewhere in the school or in another school • use the word count tool to check the length of a document • use bullets and numbering tools • confidently choose the correct page set up option when creating a document • confidently use text formatting tools, including heading and body text • use the ‘hanging indent’ tool to help format work where appropriate (e.g. a play script)
<i>Using the internet:</i>	<i>Databases:</i>	<i>Presentation:</i>
• use a search engine using keyword searches • compare the results of different searches • decide which sections are appropriate to copy and paste from at least two web pages • save stored information following simple lines of enquiry • download a document and save it to the computer • contribute to discussions online • use complex searches using such as ‘+’ ‘OR’ ‘Find the phrase in inverted commas’	• create a formula in a spreadsheet and then check for accuracy and plausibility • search databases for information using symbols such as = > or < • create databases planning the fields, rows and columns • create graphs and tables to be copied and pasted into other documents • collect live data using data logging equipment • identify data error, patterns and sequences • use the formulae bar to explore mathematical scenarios • create their own database and present information from it	• use a range of presentation applications • consider audience when editing a simple film • know how to prepare and then present a simple film • use ICT to record sounds and capture both still and video images • make a home page for a website that contains links to other pages • capture sounds, images and video • present a film for a specific audience and then adapt same film for a different audience • create a sophisticated multimedia presentation

Year	Autumn Term	Spring Term	Summer Term
A	Algorithms and Programmes: How can I program each step of an algorithm, reviewing and amending as we go?	Databases: How can we create a database, containing formulas, to record and present data?	Data retrieving and Organising: How can I create an information poster using my own graphics skills to good effect?
B	Using the Internet: How can I use complex searches to discover information online?	Communicating: How can I communicate effectively online?	Presentation: How can I create a sophisticated multimedia presentation?

ASSESSMENT OPPORTUNITIES – What are children aiming for?

Children will be able to demonstrate their learning through:

- Varied outcomes linked to the tasks each term
- Design their own spreadsheet for a particular purpose – to support maths knowledge for example.
- Having computing work displayed around school

ENRICHMENT OPPORTUNITIES –

What can we give children along the journey to help them remember more?

We will endeavour to include:

- Support/challenge resources visible on the IWB and print-outs
- Animated stories to be shared to other classes
- Visits by other computing professionals
- Presentation skills in delivering weekly worship

CROSS-CURRICULAR LINKS –

What links can we make to help children make sense of what we want them to know and be able to do?

This itinerary fits with our other learning through:

- Maths: budgeting activity; graph work to present data
- PSHE: internet safety
- Use of word processing to practise skills

LEARNING BEHAVIOURS Children will be expected to:

Tries new things	create formulas suitable for a particular purpose.
Works hard	work with variables and various forms of input and output.
Concentrates	remain focused on the task in hand and fight any distractions.
Self-motivates	challenge themselves by sometimes having a go at the more difficult tasks on offer.
Imagines	create appropriate animations for a story scene.
Improves	detect and correct errors in algorithms and programs.
Understands others	when sharing a laptop, be patient with my partner and support them when necessary.
Doesn't give up	add interactive user features to a scene or story.